

ART. V. *Remarkable Case of Ascites in a Child.* By JOHN A. ELKINTON, M. D. [With a wood-cut.]

JANE M'KINLEY, æt. 4 years, came under my care in November, 1833, with abdominal dropsy. She had been twice tapped before I saw her. I found the patient with an enlarged, tumid abdomen; distinct fluctuation, and considerable uneasiness and distress, particularly when in a recumbent posture. This condition of things continued to increase without any apparent relief from medicines, and the urgency of the symptoms demanding it, I performed the operation of *paracentesis abdominis* for the first time, November 21st, 1833.

After the fluid was removed, a tumor was perceived occupying the epigastric region, which, upon examination, was found to be the left lobe of the liver in a state of induration and enlargement.

Believing the disease to be the result of chronic viseral enlargement, an alterative plan of treatment was instituted, and mercury was cautiously administered. Externally, fritinns of ung. hydrarg. alternated with ung. iodin. were fairly tried over the region of the liver. For a long time various means were resorted to, and persevered in without success. Several months having elapsed under these circumstances, and no impression being made on the disease, I embraced every opportunity of exhibiting the patient to my medical friends, with a view of profiting by their suggestions. During this period, while under the influence of medicines adapted to her case, the accumulation of fluid continued, and she was frequently tapped. The necessity for tapping appeared to increase by the distention becoming more and more rapid after each operation. Despairing of curing the disease by medical treatment, I determined on making more accurate observations in future, and to record such particulars of her case as were most interesting. The enormous distention of this young creature, together with a countenance rendered grave and haggard by long suffering, and a mind singularly matured and observant, created in all around her, a respect and sympathy felt for those of riper years. The following details are from my notes of June 30th. "Samuel M'Kinley's daughter, aged four years, I tapped to-day at 3 P. M. Drs. GRISCOM of New York, and JAMES S. CALDWELL of this city, present. The following admeasurements were taken before the operation. From the spine horizontally, over the umbilicus, three feet one inch; from the sternum to the pubis, transverse to the former measurement, two feet; thorax, girth seventeen and one-eighth inches; quantity of fluid removed, twelve pints. Dropsy supervened to an

attack of scarlet fever. The operation of paracentesis abdominis has been performed ten times, averaging eleven pints of fluid each time; whole amount of fluid removed from this little sufferer by tapping is one hundred and ten pints, or thirteen gallons three quarts. At present the liver appears mainly implicated in the disease; it may be felt after tapping, very distinctly, and its external periphery traced out with the fingers, from its prominent position in the epigastric region. It is also indurated, and presents no favourable prospect of cure. The gall-bladder could also be distinctly felt.

"Dr. Griscom recommended the *Apocynum cannabinum*, which had been used, and was again employed with but inconsiderable benefit. All remedies have thus far failed. Tapping is resorted to as a palliative merely, to prolong and alleviate existence."

August 7th.—The accompanying figure is from a drawing taken to-day by my friend, Mr.

WILLIAM D. CALDWELL.

The patient is represented sitting in a state of nudity, with the arms resting on the end of a settee. The likeness is striking, and scrupulously accurate in its proportions. From pubis to sternum, is 24 inches; from spine over umbilicus, horizontal circumference, 37 inches; thorax circumference, 17½ inches.

10th. Three days after the drawing was taken, I tapped her again. At this operation I removed eighteen pints by measure of fluid.

Heretofore some slight benefit had occasionally been supposed to result from the variety of remedies employed, but now all influence of medicine over the disease was lost. If the distention had been protracted at any former period by the means that were used, no such temporary benefit could now be observed. In proportion to the advancement of disease, the susceptibility to medicines gradually diminished. In less than a month, so great was the accumulation of fluid, that my services were again solicited. Parents and child im-



portuned me daily for another tapping. As usual, I delayed the operation as long as possible. To be continually plunging a trochar into the belly of a child, whose disease admitted of no other mode of relief, was painful in the extreme.

September 3d.—Having made arrangements for repeating the operation to-day, my intentions were superceded by the kindly interposition of death coming to her relief.

She died about 3, A. M. twenty-four days subsequent to the last tapping. In this comparatively short period of time, there was a much larger accumulation of fluid and corresponding distention of the abdomen, than had been manifested at any previous operation. An incision was made into the cavity of the belly, and twenty and a half pints of fluid withdrawn; making thirty-eight and a half pints since the 31st June, a little more than two months. The aggregate amount of fluid deposited as above, and removed by tapping, is *one hundred and eighty-four and a half pints*, or more than *eighteen and a half gallons* in a child a little over four years of age.

It is curious to contemplate how existence could be maintained so long, with such an immense drain from the system: it is also remarkable the immense weight and distention which the integuments under such eireumstances are capable of sustaining.

In this patient there was sallowness of complexion, with emaciation, but no œdema of the extremities or face. All the fluids of the body seemed to be determined to the peritoneum, and through that tissue pour out their serum. The enlarged veins over the abdomen, distended with blood, presented a deep blue or black appearance; and were very conspicuous before tapping, as is shown in the drawing. This blood appeared in a half stagnant condition in the superficial vessels, and quiescent, unless influeneed or impelled by gravitation or force, when it moved along like passing through inanimate tubes. Owing to the prejudices of the family, we were prevented making a satisfactory autopsy. As time was limited, the liver was removed for subsequent inspection, and with the assistance of my friend, Dr. WILLIAM ASHMEAD, we discovered the following appearances in that organ.

Condition of the Liver.—In the substance of the liver was found a large quantity of concrete bile, blocking up the hepatic ducts in every direction. More than $5\frac{1}{2}$ lbs. of this peculiar substance were obtained in the course of the examination. On opening the ductus communis in the transverse fissure of the liver, it was found distended to the size of a quill, with inspissated bile of a very dark brown colour, and as firm as wax; this inspissated bile blocked up and distended all the ducts of the right lobe,

nearly to the size of a quill, but mostly diminishing in diameter near the surface of the liver: in places there was some fluid bile of an orange colour, mixed with the concrete. One duct especially, which lay very near the surface, along the longitudinal sulcus, was distended much larger. Those of the left lobe generally contained thick fluid bile, but few of them had much of the concrete. The mucous coat of the distended hepatic ducts was softened, spongoid and injected.

This condition of the liver will explain the difficulty of managing the case, and the inefficiency of medicines in the latter stage of the disease. The functional derangement of this organ alone is sufficient to account for all the phenomena detailed.

The following accurate description of the autopsy has been politely furnished by my friend, EDWARD HALLOWELL, M. D.

Autopsy, performed ten hours after death.—Abdomen greatly distended; the superficial veins much enlarged, and the integuments slightly discoloured; emaciation very considerable; twenty and a half pints of a straw-coloured fluid were removed from the abdominal cavity; it did not coagulate on the application of heat, but contained a large quantity of a tremulous jelly-like substance, occurring in separate masses, about the size of a small orange, but of irregular form. The abdominal parietes were of considerable thickness, and notwithstanding the general emaciation of the patient, contained a considerable quantity of fat. The peritoneum was perfectly white, somewhat thickened, and exhibited a slightly granular appearance. The surface of the intestines was of the same colour, such as they might be supposed to present after frequent washings. The liver was found adherent to the diaphragm and the lesser curvature of the stomach; it was exteriorly of a greenish-brown colour, and presented several inequalities on its convex surface. It was hard to the touch, but did not appear to be much enlarged; its *texture* was very firm; the acini was strongly developed, and the cellular tissue surrounding them was of a yellow colour. An incision was made into the hepatic duct, which was much distended, and filled with a dark orange-coloured substance, of the consistence of wax, which appeared to extend throughout its ramifications. It was laid aside for future inspection. The stomach contained a considerable quantity of fluid ingesta. Its mucous membrane was pale throughout, but appeared to possess a good consistence. The intestines were examined hurriedly, but presented nothing remarkable. No obliteration was observed in the *ductus communis choleducus*. The lungs and brain were not examined, in consequence of the necessity of performing the autopsy as speedily as possible, the parents of the child being extremely averse to it.